Chapter 7 quiz, November 16, 2011. Not to be graded. 10 minutes.

Suppose $X \sim \text{Binom}(100, 0.1)$. We want to use the Central Limit Theorem (CLT) to calculate probabilities about X.

1. To justify the use of CLT, we need to argue that (1) X is the sum (or mean) of an i.i.d. sample of something, and (2) the sample size is large. Make these two arguments.

2. Use CLT and Table A.3 to calculate (approximately) $P(X > 15)$, $P(X > 20)$, and $P(X > 30)$.